

In re Application: Nam, Sang Seon
Application No. 10/563,541
Page 2

IN THE CLAIMS:

Please amend claims 1 as follows, and cancel claims 2 and 4-5, as set forth in the complete claim listing below. This listing of claims will replace all prior versions and listings of claims in the application:

1. (Currently Amended) An apparatus for producing ozone by electrolysis of water, the apparatus consisting of:

- a) an anode for producing oxygen, ozone by electrolysis in water;
- b) a cathode for producing hydrogen by electrolysis in water;
- c) a solid polymer electrolyte membrane disposed between the anode and the cathode for transferring hydrogen ion produced by the electrolysis;

d) a polytetrafluoroethylene spacer for providing a gap between the solid polymer electrolyte membrane and said anode; and

[d] e) an auxiliary electrode disposed sandwiched between the cathode and the solid polymer electrolyte membrane and in direct contact there between, wherein the auxiliary electrode passes hydrogen ion produced at the anode through the cathode, and wherein a scale is formed on the surface of the auxiliary electrode by a reaction of $2+$ cation and OH^- ion produced at the cathode, thereby alleviating scale formation on the surface of the cathode, and wherein the auxiliary electrode has the form of a mesh net having 10~100 meshes and a thickness of 0.1~2.0 mm.

In re Application: Nam, Sang Seon
Application No. 10/563,541
Page 3

2. (Canceled)

3. (Original) An apparatus according to claim 1, wherein the auxiliary electrode is formed of stainless steel, titanium, platinum or platinum coating.

4. (Canceled)

5. (Canceled)